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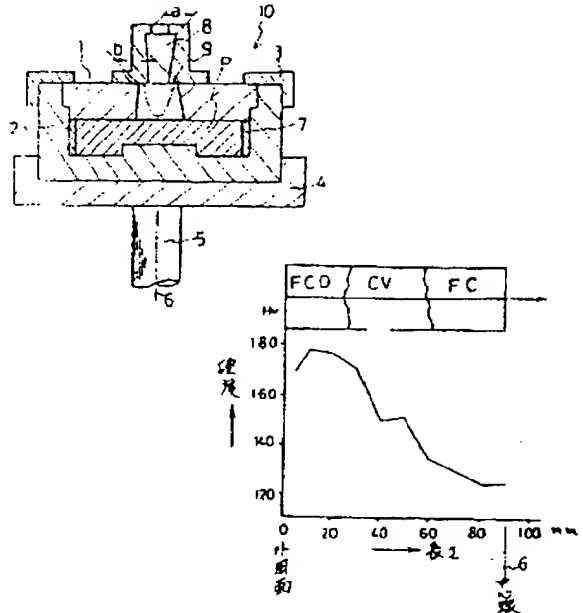
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TITLE : CAST IRON CASTINGS HAVING
FUNCTIONARLLY GRADIENT



ABSTRACT : PURPOSE: To obtain the FCD-CV-FC cast iron castings in which only the required part is provided with excellent strength, hardness and wear resistance by one time pouring by setting a spheroidizing agent in a preheated die for centrifugal casting and pouring FC molten metal into the rotating die.

CONSTITUTION: A spheroidizing agent 7 of Fe-Si-Mg series or the like, 0.2 to 0.8wt.%, regulated to 5 to 50 mesh is charged to the position on the inner side face of a lower die 2 of a molding die 10 for centrifugal casting preheated to 100 to 500°C. Next, FC molten metal is cast into the die 10 in which rotation is raised until the centrifugal force comes to G No 0 to 1000 with a rotating axis as a center so that the pouring temp. is regulated to 1350 to 1550°C. Furthermore, as the above FC molten metal, the one, e.g. contg., by weight, 3.5% C, 2.4% Si, 0.3% Mn, 0.04% P and 0.0018% S is used. By the above method, the manufactured articles having the property of which the outer circumferential part is strong and hard and softness increases in accordance with the progress into the inner circumferential part can be obtd. by a single die and one time pouring and rotating.

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